The Relationship of Eating Disorders and Substance Abuse

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Why Are People Interested In This Relationship?

- Clinicians
  - My experience treating eating disorders
    - How to deal with two out-of-control disorders?
    - Are they related? Similarly treated?
    - Does treatment of one affect the other?
- Researchers
  - What is the mechanism of the relationship?

Why Did I Get Interested?

- University of Michigan ward that was half ED and half CD
  - Many staff wanted this to be a pure split, but the patients just wouldn't cooperate
    - ED patients were reported to be substance abusers by CD patients; CD patients were reported to have eating disorders by ED patients
    - Ward staff were often split by patients and by worries over 12 step and CBT conflicts

What Should I Have Known?

- Crisp (1968) and other early describers of eating disorders made observations like “chronic patients (with anorexia and bulimia) who have progressed to a state of overeating and vomiting not infrequently appear to become dominated by oral behavior, and may sometimes present with alcoholism”

What Should I Have Known (continued)

- Female patients with anorexia and bulimia have high rates of alcoholism compared to usual rates
  - Anorexics with bulimia have much higher rate of alcohol use disorders than anorexics without bulimia
  - Bulimics have high rates (24-60%)
  - Women with alcohol problems have high rates of bulimia (these women are thought to have secondary rather than primary alcohol problems)
  - Problems not limited to alcohol (might make sense due to calories); also see this relationship with cocaine, caffeine, cigarettes, and, probably, opiates

But How Do These Two Sets of Behaviors Occur Together

- Hard to understand why women trying to avoid calories would use alcohol (empty calories)
- Is it depression or anxiety that patients are trying to self-medicate?
  - Probably not; a study at MI showed that among young female patients presenting to other psych clinics who did not have ED's, those who had subclinical symptoms of ED's (mostly severe dieting) were CAGE + 42% of time vs. 18% CAGE+ in those with no severe diet sx.
  - Probably not a simple reflection of "addictive personality"

Well, Then What Is The Mechanism?

- Studies of Meisch and Carroll
  - Partial deprivation of food in rats results in increased self-administration of:
    - Alcohol
    - Morphine
    - Cocaine
    - Barbiturates
    - Electrical rewarding brain stimulation

Well, Then What Is The Mechanism?

- Not simple genetics
  - Bulimics + alcohol probs have alcoholics in family while bulimics – alcohol probs don't have alcoholics in family (Lilienfeld et al)
- Can deprivation change the brain?
  - Chronic food deprivation in rats leads to decreased extracellular dopamine in the nucleus accumbens (Pothos et al)
- D2 receptors are lower in morbidly obese people like they are in addicts (Volkow et al)

If deprivation is an important trigger of substance abuse, does it happen in humans/

- Minnesota starvation study
  - Nl wt, nl psych men put on ½ rations consumed much more nicotine and caffeine while becoming obsessed with food and sometimes binge eating
- Drewnowski et al: There is a wide range of severity of dieting behaviors (ie self-starvation) in college freshmen women

Michigan Study of Dieting Severity and Substance Use

- Dieting frequencies
  - Nondieter wt=117.5
  - Casual dieter wt=122
  - Intense dieter wt=124
  - Severe dieter wt=125
  - At-risk dieter wt=127
  - Probable bulimic wt=135
- And the more you dieted, the more wt you gained during your freshman year

Michigan Study of Dieting Severity and Substance Use

- Drinking increased with increasing severity of dieting behaviors
  - Prevalence and frequency of drinking, frequency of heavy drinking, and frequency of symptoms of alcohol abuse/dependence increase in graded manner with increased dieting severity
  - Prevalence of marijuana and cigarette use showed same pattern
  - Frequency of blackouts and unwanted sex also increase with increased dieting severity

Michigan Study

- Those students who reported a nonconsensual sexual experience prior to entering university were more likely to drink, to drink heavily, and to drink in an abusive manner
- The relationship between NSE and drinking did not explain the relationship between dieting and drinking

Why Don’t All Dieters Become Bulimic Alcoholics?

- The true answer is we don’t know
- Most dieters start out as restrictors; if they are going to switch to binge eating, they do so in the first 2 years (approximately)
- If that switch occurs, their rate of alcohol and other drug problems increases
- Could that switch be related to temperament?

Implications for Treatment

- Two issues to be in denial about; two chances for motivational enhancement
- Patients who are in recovery from alcoholism do not do worse than other patients in recovery from bulimia (Mitchell et al)
- Need to get some cross-training in your programs or at least a good relationship with other treaters.

Implications for Treatment

- Best studied intervention for BN is CBT; CBT also works for alcohol and other drug disorders—probably the easiest blend.
- 12-step has only anecdotal efficacy in BN but is clearly effective in AODA issues; need to adapt 12-steps as by Craig Johnson and Laureate clinic;
  - Pursuit of thinness has made life unmanageable

Implications for Treatment

- Should probably counsel non-drinking BN patients to avoid alcohol; especially if they have positive FH for alcohol and other drug problems
- Does eating help control urges to use drugs/alcohol
  - Anecdotal evidence in both directions
    - Living Sober vs substitute addiction

Implications for Treatment

- Newly abstinent alcoholics do report that eating decreases urge to drink
- Study in progress comparing eating sweets in response to urges; eating normally; and avoiding sweets
- Also studying HALT and their relationships to urges

Questions

- And thanks for having me
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